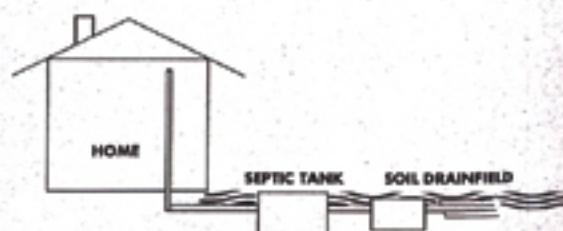


Why Maintain Your System?

There are three reasons why septic system maintenance is important to you and your community. The first is money. The minimal cost and effort required to maintain your system can save you or delay future expenditures that could total up to \$3,000 to \$10,000 or more for a replacement system. The second and most important reason is the health of your family and community. Inadequately treated wastewater can pose significant human health risks and can contaminate wells, groundwater and surface water resources. The third reason to maintain your system is to prevent the decline of property values in your community. To fully appreciate the value of maintenance, however, it is important to first understand how your system works.

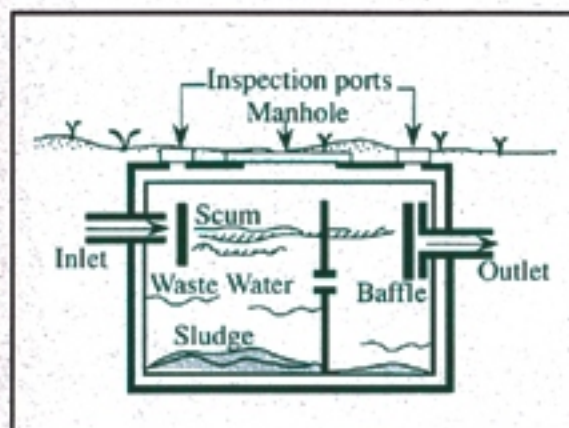


How Your System Works

Home septic systems consist of two principle components: a septic tank where solid waste is stored and an absorption area where wastewater is treated.

Bathroom, kitchen and laundry waste drains through a large pipe (house sewer) into your septic tank where it separates out into three layers:

1. Solids settle to the bottom and, through the action of anaerobic bacteria, decompose to form a bottom sludge.
 2. Insoluble greases and oils, which are lighter than water, form a floating surface layer of scum.
 3. The wastewater that remains after solids and scum have separated out forms a middle layer.
- The anaerobic decomposition that occurs in the septic tank is very incomplete. Septic tanks must be



regularly pumped (usually every 2 to 3 years) to remove the accumulation of bottom sludge and surface scum. Fortunately, however, home septic systems are designed to treat the separated wastewater much more thoroughly. Beyond the septic tank, your septic system consists of a delivery means for distributing wastewater beneath the ground surface where it will undergo further decomposition through the action of aerobic bacteria present in the soil.

Wastewater leaves your septic tank through an outlet surrounded by scum and gas baffles. These baffles help ensure that wastewater flowing to the absorption area is relatively free of scum and solids which could seriously shorten the working life of your system by clogging leach lines and blocking trench walls. A tee equipped with a filter at the outlet is another extremely

effective means of preventing scum and solids from leaving your septic tank.

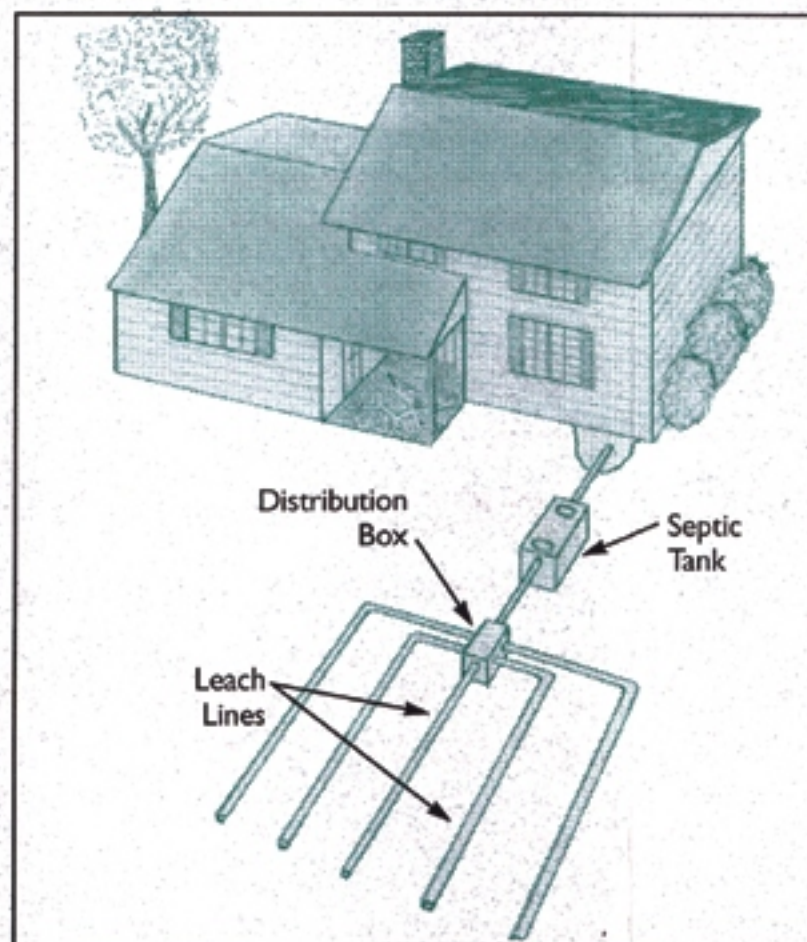
From the septic tank, wastewater flows through an effluent line to the distribution box. This box distributes wastewater through header pipes to perforated leach lines set in absorption trenches of stone aggregate. New, "gravel-less" systems offer an alternative to trenches filled with stone. These systems replace conventional perforated leach line either with leaching chambers or with pipe wrapped in geotextile.

In the typical absorption field, each length of leach line or leaching chamber is set in its own individual trench. This results in an absorption field

consisting of a series of parallel trenches that are about 18" to 30" deep. Because the aerobic bacteria that decompose waste thrive mostly in this upper area of the soil, this type of system provides the most thorough treatment of wastewater. It also helps protect groundwater from possible contamination by affording the greatest possible separation distance between trench bottom and the water table. Occasionally, however, space limitations may require different approaches. If soil and ground water conditions permit, seepage pits are an option. Another alternative is a stone bed where all the leach line is laid in a single, wide trench with stone aggregate.

All absorption areas, regardless of type, are subject to the same aging processes. In every case, a biomat forms on the trench walls. Initially this biomat aids wastewater treatment by straining out pathogenic bacteria. But, as more bacteria and waste add to the biomat, the trench walls become more impervious to the passage of wastewater. Silting and soil compaction can further slow the absorption rate. Eventually, wastewater might either back up into the house drainage plumbing or seep out onto the ground surface.

With constant usage, this aging process is inevitable. Usually, however, moderate maintenance can prevent premature failure. The following list of maintenance tips can help you prolong the working life of your system.



Do have your septic tank pumped out every two to three years by a Department of Environmental Conservation permitted waste hauler. Under-sized tanks in older systems may require more frequent pumping. An annual inspection can determine scum and sludge accumulation. Failure to periodically pump your septic tank can result in a carryover of solids into your absorption field. If solids clog leach lines and block trench walls, you probably will have to abandon your existing absorption field and install a new one elsewhere in your yard. Such repairs are inconvenient and may far exceed the cost of the original system.

Do have your septic tank inspected for cracks and leaks, broken lines and damaged baffles or tees each time you have it pumped out. Winter ground frost can occasionally displace tank inlet and outlet lines, resulting in breakage at the tank wall. If your tank outlet is equipped with a filter, this should also be checked and replaced periodically.

Do limit water consumption. Spread laundry washing over the entire week and set your washing machine at the proper setting for a given load so as not to waste water. Limit the length of showers. Use water-saving toilet, shower and faucet fixtures.

Do repair leaking toilets and dripping faucets immediately! If ignored over a period of time, seemingly insignificant leaks and drips can shorten the working life of your septic system, especially if your system is sited in tight soils.

Do maintain a ground cover of grass over your absorption field. Grass prevents soil erosion and promotes the evapotranspiration of moisture from the soil.

Do watch for trouble signs such as a soggy or flooded absorption field and/or the odor of sewage. Wastewater on the ground surface is a violation of the Monroe County Sanitary Code and signals the need for immediate repairs.

Do keep children and pets away from areas of standing wastewater. Household wastes contain pathogens and toxins.

Do plan ahead! Remember that the addition of a new bedroom, water-using appliance (especially a garbage disposal) or spa may increase the demand on your septic system. The rapid draining of a spa, whirlpool or hot tub can interfere with the waste separation process in your septic tank and cause a carryover of solids into your absorption field. A drain pump or valve should limit the draining of these units to no more than five gallons per minute.

DO NOT attempt to pump out, enter your septic tank or dispose of its contents yourself! Only licensed, qualified persons should attempt these tasks. Due to the danger of toxic gases, an empty septic tank should be entered only by properly equipped, trained personnel.

DO NOT flush relatively non-degradable materials such as plastics, paper (other than toilet paper), rags, sanitary napkins, condoms, disposable diapers, coffee grounds, cat box litter, cigarette/cigar butts or cooking fats/oils into the septic tank.

DO NOT discharge products such as oil, gasoline, antifreeze, kerosene, turpentine, paint, pesticides, herbicides or concentrated acids or bases into the septic tank. Such products alter septic tank chemistry, kill off bacteria necessary for waste decomposition and contaminate groundwater.

DO NOT use septic tank additives. Biological additives are not needed and chemical additives can cause solids to carry over and clog the absorption system.

DO NOT pump sump pit groundwater or furnace humidifier water into your septic system. This is not wastewater and does not require treatment. Discharge it away from the absorption field area.

DO NOT discharge laundry water into a sump pit. Laundry water is wastewater and requires treatment.

DO NOT allow roof gutter downspouts or surface water to drain into the absorption field area.

DO NOT locate a swimming pool near the absorption field. Don't backwash swimming pool filters into the absorption field area! Don't plant trees or shrubs in the absorption field area. Their roots can disrupt and clog laterals. Don't drive heavy vehicles or equipment over the absorption field. These will compact the soil and displace or damage leach lines, distribution boxes and drop boxes.



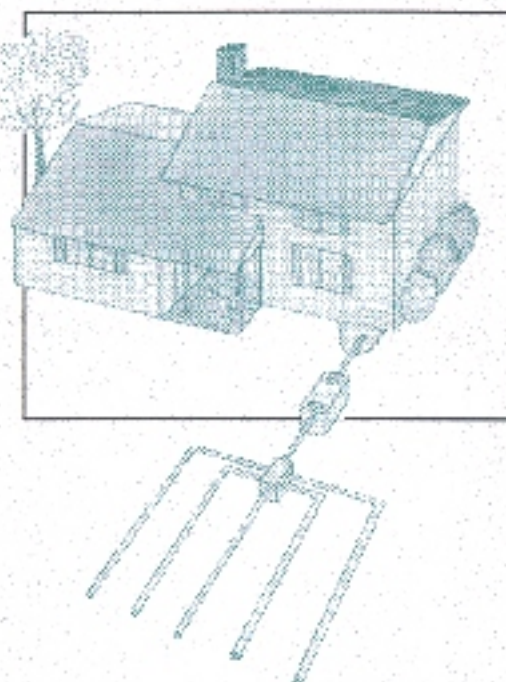
DO NOT repair your system without first obtaining the required Health Department permit. Use a reputable contractor. Ask for references. Illegal shortcuts often lead to future expenses.



Jack Doyle
County Executive

For more information, call or write:
Monroe County Department of Health
111 Westfall Road • PO Box 92832
Rochester, New York 14692
716/ 274-6055

SEPTIC SYSTEM Care & Maintenance



*How to Save Money,
Protect Health, &
Maintain Property Value*